

Appl. No.: 10/798,058
Amdt. dated September 26, 2006
Reply to Office Action of August 9, 2006

Amendments to the Specification:

Please replace the paragraph beginning on page 37, line 6 with the following replacement paragraph:

An *in vitro* system is developed to demonstrate the functionality of a *Bt* toxin receptor of the invention. Well known molecular biological methods are used in cloning and expressing the BCW *Bt* toxin receptor in Sf9 cells. A baculovirus expression system (GibcoGIBCO™ Invitrogen Corporation, Carlsbad, California) is used according to the manufacturer's provided protocols and as described below. *S. frugiperda* (Sf9) cells obtained from ATCC (ATCC-CRL 1711) are grown at 27°C in Sf-900 II serum free medium (GibcoGIBCO™ Invitrogen Corporation, Carlsbad, California). These cells, which are not susceptible to Cry1Ab toxin, are transfected with an expression construct (pFastBac1 bacmid, GibcoGIBCO™ Invitrogen Corporation, Carlsbad, California) comprising an operably linked *Bt* toxin receptor of the invention (SEQ ID NO:1) downstream of a polyhedrin promoter. Transfected Sf9 cells express the BCW *Bt* toxin receptor and are lysed in the presence of Cry1Ab toxin. Toxin specificities, binding parameters, such as K_d values, and half maximal doses for cellular death and/or toxicity are also determined.

Please replace the paragraph beginning on page 37, line 26 with the following replacement paragraph:

For transfection, 2µg each RBBCW1 or RBGUS DNA is mixed with 6 µl of CellFectin (GibcoGIBCO™ Invitrogen Corporation, Carlsbad, California) in 100 µl of Sf900 medium, and incubated at room temperature for 30 minutes. The mixture is then diluted with 0.8 ml Sf-900 medium. Sf9 cells (10⁶/ml per 35 mm well) are washed once with Sf-900 medium, mixed with the DNA/CellFectin mixture, added to the well, and incubated at room temperature for 5 hours. The medium is removed and 2 ml of Sf-900 medium containing penicillin and streptomycin is added to the well. 3-5 days after transfection, Western blotting is used to examine protein expression.